

Purpose

The Occupational Safety and Health Administration (OSHA) in 29 CFR 1910.1030 requires *UDOT* to have in place an infection control plan for Bloodborne Pathogens. This policy is to minimize or eliminate exposure to communicable diseases by adoption of universal precautions and implementation of Department-wide training. This plan includes requirements for personal protective equipment, training, and a procedure for reporting exposures. Any employee, who by way of their employment with *UDOT* may be exposed to bloodborne pathogens, will be covered by this plan.

Policy

At an accident scene, first line care will consist of calling 911. The providing of safe minimum care until help arrives shall be on a "Good Samaritan" voluntary basis using B.S.I. (Body Substance Isolation) techniques for safety. All injured persons and all body substances must be treated as if known to be infectious. *UDOT* has adopted this Bloodborne Pathogens Policy as a means to educate its workforce on the nature of preventable bloodborne diseases. Background information which may be used in training, departmental responsibilities from Risk Management through supervisor to employee are outlined herein, as well as post incident medical intervention, and record keeping.

Definitions

Biological Hazard. Biological hazard or biohazard is taken to mean any viable infectious agent that presents a risk, or a potential risk, to the well being of humans. Human body fluids are biological hazards and include: blood, blood by-products (such as breast milk), semen, vaginal secretions, body cavity fluids, and saliva. The following are **not considered biological hazards**: feces, urine, nasal secretions, sputum, sweat, tears, or vomitus, **unless** they contain visible blood. HIV is carried in the blood lipid (fat). HIV does not last long in air, and is dead when dry. Hepatitis-B virus is known to survive up to a week or longer (under ideal conditions). It is not known how long or under what conditions it can persist in the environment. Saliva can transmit hepatitis-B virus, but cannot transmit HIV. Mucous membranes in the eyes, nose, and mouth are vulnerable to infectious body fluids.

Bloodborne Pathogen. Pathogenic microorganisms that are present in human blood can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

Blood Exposure. All employees exposed to human blood and blood by-products must report to their doctor (within one hour), immediate supervisor and their Region/District Safety/Risk Managers or Claims Specialist for the *UDOT* complex for information on post exposure procedures.

Contaminated. The presence or the reasonably anticipated presence of blood or other potentially infectious body fluids on an item or surface.

Cuts. If an employee has a needle stick, cut, chapped or abraded skin, or mucous membrane exposure to another person's body fluids, he/she must report the incident **within one hour** to their doctor, and as soon as possible thereafter to their supervisor, and Region/District Safety/Risk Managers or Claims Specialist for the *UDOT* complex for evaluation.

Decontaminated. The use of physical or chemical means to remove, inactivate, or destroy bloodborne pathogens off a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal. An antibacterial/antiviral solution for decontamination may be prepared from a 10% solution of sodium hypochlorite (common household bleach). A 10% solution is two cups of bleach to one gallon of water. Contaminated items must be soaked in an antibacterial/antiviral solution for a minimum of 10 minutes.

Human Immunodeficiency Virus (HIV) Prophylaxis. Currently, no vaccinations are available for HIV exposure, although a short-course regimen (3-6 months) of a combination of antiretroviral medications can be used to decrease the risk of infection after exposure to HIV.

Hepatitis-B Virus (HBV) Vaccinations. Routine HBV vaccination is not offered by the Department because no current job descriptions have a high risk of occupational exposures to blood or other potentially infectious materials. The Department recognizes an exposure incident may occur from aid to an accident victim (or victims) or less likely, as an incidental result of highway trash pick up. HBV vaccination is not mandatory after an exposure incident, however it is recommended. If an affected Employee chooses not to have the vaccination, they will have the opportunity to be vaccinated when they are ready. The Department will document the offer, acceptance or declination, and vaccination dates with the *Hepatitis-B Virus Vaccinations* form.

Medical Wastes. Extreme caution must be used whenever the following are present: waste debris left by an ambulance crew from an accident scene, packaged "biological hazardous waste" discarded along the roadway, used needles or other sharps (razor blades, broken glass, scalpels, etc.). Sharps must not be sheared, bent, broken, recapped, resheathed, or handled in any way by *UDOT* personnel or volunteers in our "Adopt a Highway" program. Contact your local county health department, who in turn will contract a licensed medical waste hauler, to handle and pick-up for disposal any biological or medical wastes found on *UDOT* right-of-ways.

Occupational Exposure: is defined as blood or body fluid (as listed above in *Biological Hazards*) contact through an injury by a blood or listed body fluid-contaminated sharp object, or an injured or ill Employee to the affected Employee. HIV does not transmit via saliva. Post exposure follow-up is mandatory and will be made available to the employee/employees who have had an occupational exposure incident. Proper notification must be made to the exposed employee's immediate supervisor and safety/risk manager to facilitate post-exposure evaluation.

Universal Precautions. These are work practices that help prevent contact with blood and certain other body fluids. They are the best protection against AIDS and hepatitis-B and some other infectious diseases. Universal precautions are a system of infectious disease controls that assumes every direct contact with body fluids is infectious, and requires every employee exposed be protected as though such body fluids were infected with bloodborne pathogens. All infectious/medical material must be handled according to Universal Precautions (OSHA Instruction CPL 2-2.44A). Universal Precautions help prevent infection through the use of protective barriers such as gloves, masks, goggles and disposable overalls.

Procedures

Training

UDOT 05D-4.1

Responsibility: Risk Management

Actions

1. UDOT Risk Management (including Region/District Safety/Risk Managers) and its Claims Specialists will provide annual training to all employees who by way of their employment may be exposed to bloodborne pathogens. Personnel trained in First Aid shall be offered this annual training as well. The content of the training program will include the following:
 - a. Department policy.
 - b. Types and transmission of bloodborne pathogens.
 - c. Universal precautions.
 - d. General safety rules.
 - e. Procurement, use, and storage of personal protective equipment.
 - f. Post exposure treatment and procedures.
2. Records of training will be kept by UDOT Risk Management for 30 years. Any reports required by OSHA will be maintained by the Region/District Safety/Risk Managers or Claims Specialist for the *UDOT* complex. All reports (Training Certificates, exposure reports) will be maintained for 30 years.
3. UDOT Risk Management will ensure proper following of the program by periodic audit.

Responsibility: Supervisor

4. Supervisors must ensure their staff is trained in proper work practices, the concept of universal precautions, personal protective equipment, necessity of immediate reporting requirements of any listed body fluid contact between two or more persons, and proper cleanup and disposal techniques of contaminated articles.
5. Universal precautions shall be regularly emphasized in tool box safety meetings to ensure employee understanding and compliance. Attendance sheets shall be kept as documentation.

Responsibility: Employee

6. Employees shall wear protective clothing in an environment where infectious disease agents may exist. Roadside trash collection presents the greatest risk to UDOT employees. Discarded needles have been found among roadside trash articles and may be infectious. If blood is found on roadside trash or at a recent vehicle accident scene, **do not handle the refuse**. Heavy duty leather gloves and footwear should be worn during roadside trash pick up activities.
7. If blood-stained debris is found in roadside debris, contact the local county health department for removal and disposal.
8. An employee who administers "Good Samaritan" first aid should, if possible, put on disposable gloves made of appropriate material such as intact latex or vinyl. If in doubt about the gloves' integrity, don several layers. (Those persons with a latex allergy should use caution in selecting disposable gloves.)
9. Employees must avoid exposure from body fluids deriving from the biological hazards cited above. Needle punctures from roadside trash, open wounds, saliva, even occasions where splashes or aerosols of matter are likely to occur can create an exposure. Each exposure situation must be evaluated by a practicing healthcare provider.
10. On the rare occasion when an employee is injured on the job and is being removed from an accident scene, or *UDOT* is involved in clean up at an accident scene, all personnel actions must take into account the potential risk of exposure to bloodborne pathogens. Employees must perform their duties in a manner that will minimize splashing, spraying, and aerosolization. Personal protective equipment must be donned (put on) to protect each employee from exposure to body fluids at the accident scene.

Exposure Incident

UDOT 05D-4.2

Responsibility: Risk Management

Actions

1. Occupationally contracted HBV or HIV will be recorded on the OSHA 200 Log of Occupational Injuries and Illnesses as an illness. Exposures to bloodborne pathogens from blood to blood contact will be recorded on the OSHA 200 Log of Occupational Injuries and Illnesses if treatment such as a short course (3-6 months) in anti-retroviral medications for HIV, or hepatitis-B immune globulin, or hepatitis-B vaccine is prescribed by a Physician.
2. Following the report of exposure, UDOT Risk Management will, if possible, contact the exposure source and request that person be tested for HIV/HBV. This testing will be done at Worker's Compensation Fund of Utah's expense. Complying with the request is not mandatory. If the exposure source is an employee who refuses the test, refusal will not affect that Employee's future employment.
3. During all phases of Post Exposure, the confidentiality of the affected Employee and exposure source will be maintained on a "need to know basis". UDOT Risk Management will use the *Post-Exposure Evaluation and Follow-up for Human Immunodeficiency Virus and Hepatitis-B Virus* form to document the exposure and offer of medical assistance to the affected Employee. The *Exposure Report to Employee* form will only be used where a UDOT employee is an exposure source. The results of any HIV/HBV tests conducted will be provided to the exposed and source Employees within 5 business days of receipt.

Responsibility: Supervisor

4. Ensure all exposure incidents are reported, investigated, and documented within the critical time frame of 1 hour.
5. When an exposure incident occurs, the immediate Supervisor takes the initial report and sees to it the Region/District Safety/Risk Manager is notified and accident investigation occurs.

Responsibility: Employee

6. Should an employee become exposed to blood or blood products as listed above, the affected Employee must report the incident within 1 hour of exposure and seek professional medical attention through UDOT's insurance policy with Worker's Compensation Fund of Utah.
7. The employee may be recommended for prompt post exposure prophylaxis or vaccination by the examining health care professional. Blood test results will take 3-14 days. Post exposure prophylaxis or vaccination may be recommended by the examining health care professional and prior to the return of blood test results (which can take between 3-14 days). Post exposure prophylaxis can be terminated any time during the treatment if the exposure source (source of contaminated blood) is found to be free of infection.
8. Following the initial blood test at time of exposure, seronegative Employees (those who did not show infection) will be retested at 6 weeks, 12 weeks and 6 months to determine if transmission has occurred. UDOT supports recommendations made by the examining healthcare practitioner or the U. S. Public Health Service be followed by the exposed Employee.

Bloodborne Pathogen Control

Universal Precautions and General Safety Rules

For Posting

The following Universal Precautions and General Safety Rules have been established to prevent the spread of viral and bacterial organisms (namely HIV/HBV). In all cases the Universal Precautions and General Safety Rules should be followed.

1. **Wear latex or vinyl gloves prior to giving first aid.** Wear heavy gloves and heavy boots for litter pick-up, as outlined in the Personal Protective Equipment for Worker Protection Poster.
2. **Treat all human body fluids and items soiled with human body fluids as if contaminated** (blood, blood by-products, semen, vaginal secretions, saliva, and any possible blood-containing body fluids) with HIV/HBV. Protect yourself by covering any broken skin with a bandage or dressing before going on duty. (**Note:** Feces, urine, nasal secretions, sputum, sweat, tears, or vomitus need not be treated as contaminated unless they contain visible blood). Human body fluids do break down in time with exposure to air.
3. **Wash exposed body areas (hands, arms, face, eyes, etc.) with antibacterial soap thoroughly.** Any parts of the body that have contacted blood or any other potentially infectious body fluids, must be thoroughly washed with warm water and soap for a minimum of 15 seconds each. This is mandatory before eating, drinking, and/or smoking anything. Immediately after providing first aid care, wash thoroughly.
4. **Contact your Region/District Safety/Risk Manager or Claims Specialist** for the *UDOT* complex **for instructions on special handling of all clothing contaminated with human body fluids.** A presoak (sprayed on the affected areas) with antibacterial/antiviral solution (two cups of household bleach to one gallon of water) for a minimum of ten minutes is required before being sent to the laundry. (**Note:** Gloves and eye protection should be worn when handling contaminated clothing until the contaminated items are presoaked in bleach solution for 10 minutes).
5. **Report any suspected exposure to HIV/HBV by human body fluid contact (via broken, chapped, or abraded skin; deep punctures and human bites; needle sticks; etc.) immediately.** You should report **within one hour** of exposure to your doctor, and as soon as possible thereafter to your immediate supervisor and Region/District Safety/Risk Managers or Claims Specialist for the *UDOT* complex to begin post-exposure evaluation and follow-up.
6. Please **contact the local county health department when possible infectious wastes are found** abandoned along roadways. A licensed medical waste handler must be contacted to remove medical wastes from *UDOT* right-of-ways.

Please Post